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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,900	11/13/2003	Baoqing Gong	200144.405D1	9482
500	7590	03/02/2005	EXAMINER	
SEED INTELLECTUAL PROPERTY LAW GROUP PLLC 701 FIFTH AVE SUITE 6300 SEATTLE, WA 98104-7092			BALASUBRAMANIAN, VENKATARAMAN	
			ART UNIT	PAPER NUMBER
			1624	

DATE MAILED: 03/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/712,900	<b>Applicant(s)</b> GONG ET AL.	
	<b>Examiner</b> Venkataraman Balasubramanian	<b>Art Unit</b> 1624	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 December 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 8-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### DETAILED ACTION

Applicants' response, which included amendment to claims 8 and 12-16, filed on 12/9/2004, is made of record. Claims 8-16 are pending.

In view of applicants' response, all 112 rejections made in the previous office action have been obviated. However, the following new rejections apply.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 8-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Moriarty et al US 2002/0065270.

Instant claims are method of use claims and the compounds of the instant claims were previously rejected as anticipated and or obvious over several prior art references in the parent application 10/236,084.

Instant claims 8 and its dependent claims 12-16 relate to method of inhibiting LPAAT- $\beta$  comprising contacting LPAAT- $\beta$  with an effective amount of the triazine compound shown in claim 8. In addition, claims 9-11 recite LPAAT- $\beta$  found in animal, mammal or human.

Specification in the Field of the Invention recites, besides inhibiting LPAAT- $\beta$ , "The invention further relates to methods of treating cancer using said triazines". Hence it appears that the term contacting in claim 8, given a broadest interpretation, would include in-vitro inhibition as well as in-vivo administration to inhibit LPAAT- $\beta$  and hence to treat cancer.

Moriarty et al., discloses several trisubstituted triazines as inhibitors of TNF- $\alpha$  useful for treating various diseases including cancer. See page 2, formula I and note the definition of X, Y, W, Z, V, R<sup>6</sup> and R<sup>11</sup>. Note when X, Y, W are nitrogens, the Z, V, R<sup>6</sup> and R<sup>11</sup> groups overlap with instant R<sup>1</sup>, NR<sup>2</sup>R<sup>3</sup> and NR<sup>4</sup>R<sup>5</sup> and therefore the triazine compounds taught by Moriarty include instant compounds. Page 6, entry 0101 for use of the compounds for treating cancer. See Table 1-4 shown on pages 38-137 for examples of triazine compounds made.

Clearly Moriarty et al. discloses several compounds within the scope of the instant claims for use as TNF- $\alpha$  inhibitors useful to treat various diseases including proliferative diseases such as cancer. While the reference does not mention use of the said compounds for inhibiting LPAAT- $\beta$ , following the teachings of Moriarty et al., one would be administering to a host the said triazine compounds to treat cancer and thus inherently performs the same function as claimed herein. See Ex parte Novitski 26 USPQ2D 1369 as well as the more recent decision, Integra LifeSciences v Merck 50 USPQ2d 1846. Also see West et al. , DNA Cell Biol. 16(6): 691-701, 1997, teaches over expression of LPAAT- $\beta$  enhances TNF- $\alpha$  synthesis. Note also the court held double patenting applies between a mode of action and the treatment of disease if one of

ordinary skill in the art would know of the connection between the two. See *Lilly vs. Barr*, 58 USPQ2d 1869, at 1879.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 8-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moriarty et al. US 2002/0065270

Teachings of Moriarty et al. as discussed in the above 102 rejection is incorporated herein. As noted above, Moriarty et al., discloses several trisubstituted triazines as inhibitors of TNF- $\alpha$ , which include instant compounds claimed herein for treating various diseases including cancer.

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Instant claims require variously substituted anilino group as substituents in the triazine ring, as well as halo, hydroxyl, alkylmercapto, alkoxy, aryloxy as substituents for  $R^1$  besides substituted amino. Moriarty et al. in Table 1-4 exemplifies triamino substituted triazine compounds but not halo, hydroxyl, alkylmercapto, alkoxy, aryloxy.

However, Moriarty et al., teaches the equivalency of exemplified compounds in Table 1-4 with those claimed with various substituents in the definitions of various variable groups on page 2. See page 2, the definition of Z, V,  $R^6$  and  $R^{11}$  groups. Thus it would have been obvious to one having ordinary skill in the art at the time of the invention was made to make compounds variously substituted in triazine ring with Z, V,  $R^6$  and  $R^{11}$  groups as permitted by the reference and expect resulting compounds to possess the uses taught by the art in view of the equivalency teaching outline above.

### **Conclusion**

Any inquiry concerning this communication from the examiner should be addressed to Venkataraman Balasubramanian (Bala) whose telephone number is (571) 272-0662. The examiner can normally be reached on Monday through Thursday from 8.00 AM to 6.00 PM.

The Supervisory Patent Examiner (SPE) of the art unit 1624 is Mukund Shah whose telephone number is (571) 272-0674.

If Applicants are unable to reach Mukund Shah within 24-hour period, they may contact James O. Wilson, Acting-SPE of art unit 1624 at 571-272-0661.

The fax phone number for the organization where this application or proceeding is assigned (703) 872-9306.

Art Unit: 1624

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1600.

*Venkataraman Balasubramanian*  
Venkataraman Balasubramanian

02/27/2005